

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Mamoru Yasui, et al.

Serial No.: 10/585,687

Filed: March 23, 2007

For: ALIPHATIC POLYESTER RESIN
COMPOSITIONS, MOLDED ARTICLES
OF ALIPHATIC POLYESTER RESIN
AND METHOD OF PRODUCING SAME

Group Art Unit: 1796

Examiner: G. Mesh

Confirmation No.: 4706

Attorney Docket: TKMT P135

DECLARATION UNDER 37 CFR § 1.132

Commissioner for Patents
Alexandria, Virginia 22313

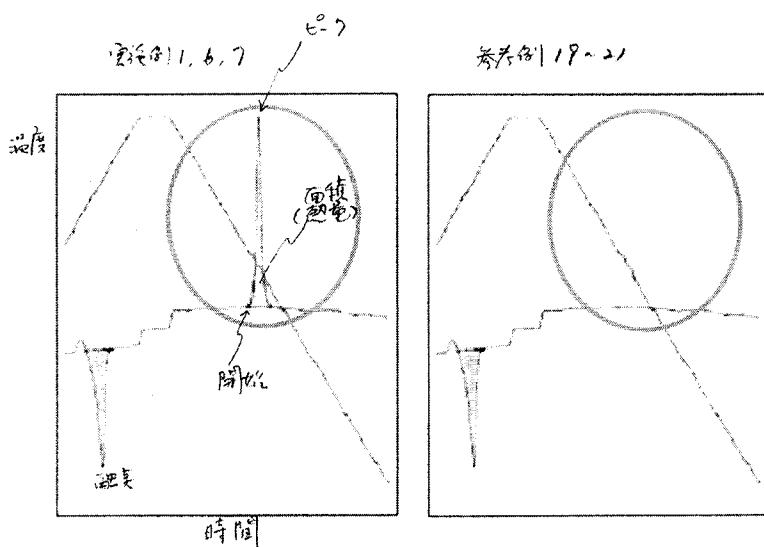
Sir:

I, Osaki Tatsuhiko, declare as follows:

1. I am the second-named inventor of the above captioned patent application.
2. I am familiar with the prosecution history of the above captioned patent application, inclusive of Preliminary Amendment "C" filed on January 10, 2011 and Declaration Under Rule 132 submitted therewith (hereinafter referred to as "the Declaration"), as well as the essence of the telephone conversation between the patent examiner and Keiichi Nishimura, Esq., attorney of record of the instant application, which took place subsequently regarding the same.
3. Regarding symbol *1 used in Table 2 of the specification, when data on

crystallization are taken on a resin composition by using a differential scanning calorimeter, it is a common practice to carry out the measurements under the conditions described in the specification (that is, by raising temperature to 210°C at the rate of 50°C/minute, maintaining at this temperature for 5 minutes and then lowering the temperature at the rate of 50°C/minute, as described first in the specification). In the experiments for the Declaration, the same method was practiced but no crystallization peak appeared in the case of Reference Examples 19-21. The absence of the peak is schematically illustrated in the panel on the right-hand side of the accompanying Figure. The panel on the left-hand side of the Figure shows the case of Test Examples 1, 6 and 7 with a distinctive peak appearing.

Figure



For both panels, the vertical axis indicates temperature and the horizontal axis indicates time. These panels are intended to show that no crystallization of the type that can result in a peak was taking place although local crystallization may have been taking place inside the sample.

4. Regarding symbol *2 used in Table 3 of the specification, I have carried out new experiments under different conditions (molding temperature = 40°C) from those from which data appearing in Table 3b were previously presented, and the new data obtained from these new experiments are shown below as follows.

Example	Kind of aliphatic polyester resin compound	Molding condition (Temperature (°C)/time(sec))	Evaluation at time of molding	Evaluation of molded articles		
			Mold release deformation	Bending test (Strength (MPa)/Elastic ratio (MPa))	Deflection temperature under load (°C)	Crystallinity (Absolute (%)/relative (%))
Test 20	P-1	40/40	A	101.3/3315	62.1	23.2/9
25	P-6	40/40	A	101.6/3322	64.4	24.8/4
26	P-7	40/40	A	103.2/3485	65.1	27.2/3
Ref 22	R-11	40/40	A	98.1/3310	60.3	22.1/5
23	R-12	40/40	A	98.2/3268	60.1	22.4/3
24	R-13	40/40	A	97.7/3112	59.4	23.1/2

Although products with no mold release deformation can be obtained from Reference Examples, crystallinity is low and hence only products inferior in strength, elasticity and deflection temperature under load can be obtained with Reference Examples. If the molding process is carried out at such a lower temperature (as 40°C, instead of at a higher temperature such as 110°C as for the examples shown in the revised specification), crystallinity values become lower even for Test Examples 20, 25 and 26 and hence their desired physical characteristics such as strength, elasticity and deflection temperature under load become less favorable. The merit of the present invention resides in that molded products having high crystallinity values can be obtained by selecting the molding temperature to be as high as 110°C while the selection of such a high molding temperature is not possible in the cases of Reference and Comparison Examples.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true. I further declare that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both (under Section 1001 of Title 18 of the United States Code), and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Osaki Tatsuhiko
Osaki Tatsuhiko

Jan. 24 , 2011
Date